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| APPLICATION NO.         | F                  | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-------------------------|--------------------|------------|----------------------|-------------------------|------------------|
| 10/803,816              | •                  | 03/18/2004 | Richard W. Neu       | 39356/46546             | 5915             |
| 21888                   | 7590               | 06/06/2005 |                      | EXAMINER                |                  |
| THOMPSO                 | ON COBU            | JRN, LLP   | BASINGER, SHERMAN D  |                         |                  |
| ONE US BA<br>SUITE 3500 |                    | ZA         | ART UNIT             | PAPER NUMBER            |                  |
|                         | ST LOUIS, MO 63101 |            |                      |                         |                  |
|                         |                    |            |                      | DATE MAILED: 06/06/2005 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)   |  |  |  |  |
|---|---|--|--|--|--|--|
|   | 10/803,816  | NEU, RICHARD W.                                      |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |  |
|   | Sherman D. Basinger   | 3617   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |  |  |  |  |  |
| Status  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 11 M   | <u>ay 2005</u> .  |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  | ·   |  |  |  |  |  |
| •   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |
| 4)  Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-27 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.   |   |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on 26 July 2004 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex  | ☑ accepted or b)☐ objected to be drawing(s) be held in abeyance. Section is required if the drawing(s) is ob  | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d). |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:   |  |  |  |  |  |

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 10, 11, 12, 17, 18, 22 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 53-40995.

Japan 995 discloses a vessel converted from single outer hull construction into double hull construction

without alteration of the single outer hull (see figures 3 and 4), said single hull vessel 1 having a central cargo tank 27

flanked on either side by port and starboard wing tanks 6, said central cargo tank being defined by pre-located port and pre-located starboard sidewalls 3 and pre-located fore and aft transverse bulkheads 4, and further

comprising an added elevated floor 22 in said central cargo tank, said elevated floor spanning

said pre-located sidewalls and said pre-located bulkheads to define within said outer hull a sealed compartment separating the central cargo tank from the outer hull and wherein said wing tank internal longitudinal bulkheads 3

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comprise the sidewalls of the central cargo tank 27.

Japan 995 also discloses a vessel converted from single outer hull construction into

double hull construction (see figure 4),

said single hull vessel 1 having a central cargo tank 27 flanked on either side by pre-

located port and

starboard wing tanks 6, each of said wing tanks having pre-located internal longitudinal

bulkheads 3

defining the sidewalls of the central cargo tank, wherein said vessel is converted into

double

hull construction solely by adding an elevated floor 22 spanning said sidewalls to define

a sealed compartment separating the central cargo tank from the single hull, and

further comprising a plurality of transverse bulkheads 4, said

transverse bulkheads defining the central cargo tank, said elevated floor extending

between and attached thereto.

Japan 995 also discloses a method for converting a vessel from single outer hull

construction into double hull

construction without alteration of the single outer hull (see figure 4), said single hull

vessel 1 having a

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central cargo tank 27 flanked on either side by pre-located port and starboard wing tanks 6, said central cargo tank being defined by pre-located port and starboard sidewalls 3 and fore and aft transverse bulkheads 4, the

method comprising adding an elevated floor 22 in said central cargo tank, said elevated floor spanning said pre-located sidewalls and said pre-located bulkheads to define with said outer hull a sealed

compartment separating the central cargo tank 27 from the outer hull, further comprising adding support members 30 for supporting said elevated floor above the outer hull.

Japan 995 discloses in figure 3 the vessel converted by claim 17.

Japan 995 also discloses a vessel converted from a tanker vessel with a single hull construction (figure 2) into a bulk cargo carrying vessel with a double hull construction (figure 4), said single hull

vessel having a central cargo tank 27 flanked on either side by pre-located port and pre-located

starboard wing tanks 6, each of said wing tanks having internal longitudinal bulkheads 3 defining the

sidewalls of the central cargo tank, wherein said vessel is converted into said bulk cargo carrying

vessel with double hull construction by adding an elevated floor 22 spanning said prelocated

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sidewalls 3 to define a sealed compartment separating the central cargo tank from the single hull

and by adding a hatch 26 in a deck 7 of the vessel above the central cargo tank to provide access to the central cargo tank.

Hatch 26 is considered to be dimensioned in a manner to allow prefabricated modular sections of the elevated floor to be passed through the hatch when the elevated floor is installed in the central cargo tank and in a manner to allow a crane positioned above the hatch to access substantially all areas of the central cargo tank.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 3, 4, 5, 6, 13, 14, 19-21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 995 in view of Hagner.

Japan 995 does not disclose the elevated floor 22 comprising a plurality of bottom plates attached to each other and to the sidewalls and bulkheads. Japan 995 also does not disclose installing a plurality of bottom plates including installing a plurality of bottom plates that span the sidewalls and attaching adjacent bottom plates to span the bulkheads.

Hagner discloses plates 81.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to cut the piece of metal from the deck of Japan into plates similar to plates 81 of Hagner so that the elevated floor 22 of Japan 995 is made up of plates attached to each other and to the sidewalls and bulkheads and such that installing a plurality of bottom plates includes installing a plurality of bottom plates includes installing a plurality of bottom plates that span the sidewalls and attaching adjacent bottom plates to span the bulkheads. Motivation to do so is not to have to handle one big plate.

The longitudinal framing system of claim 4 would be made up of 30 and 31 of Japan 995.

The added support members of claim 5 would be 22a of Japan 995.

The added support members of claim 6 would be 15 of Japan 995.

The hatch of claim 21 is 24 of Japan 995.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 995 and Hagner as applied to claim 3 above, and further in view of Garcia. Japan 995 does not disclose said central cargo tank including a longitudinal bulkhead extending along a length thereof to form a plurality of central cargo tanks, at least one of said central cargo tanks having said elevated floor, and wherein each of said plurality of central cargo tanks has an associated elevated floor.

Garcia discloses a central cargo tank including a longitudinal bulkhead 18 extending along a length thereof to form a plurality of central cargo tanks

12 and 14.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains in view of the teachings of Garcia to provide Japan 995 with a longitudinal bulkhead similar to 18 of Garcia extending along a length thereof to form a plurality of central cargo tanks. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide at least one of said central cargo tanks with the elevated floor 22 and also to provide each of the plurality of central cargo tanks with an associated elevated floor.

Motivation to do so is to convert a ship which has a plurality of central cargo tanks with the teachings of Japan 995, , or to modify the ship of Japan 995 to be of the type which has two central cargo tanks, each smaller than a single larger tank. Thus, different types of cargo can be carried in each of the tanks making the ship more versatile.

6. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 995 in view of Garcia.

Japan 995 does not disclose said central cargo tank including a longitudinal bulkhead extending along a length thereof to form a plurality of central cargo tanks, at least one of said central cargo tanks having said elevated floor.

Garcia discloses a central cargo tank including a longitudinal

bulkhead 18 extending along a length thereof to form a plurality of central cargo tanks 12 and 14.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains in view of the teachings of Garcia to provide Japan 995 with a longitudinal bulkhead similar to 18 of Garcia extending along a length thereof to form a plurality of central cargo tanks. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide at least one of said central cargo tanks with the elevated floor 22.

Motivation to do so is to convert a ship which has a plurality of central cargo tanks with the teachings of Japan 995, or to modify the ship of Japan 995 to be of the type which has two central cargo tanks, each smaller than a single larger tank. Thus, different types of cargo can be carried in each of the tanks making the ship more versatile.

## Response to Arguments

7. Applicant's arguments filed May 11, 2005 have been fully considered but they are not persuasive. The rejections with Japan 58-174078 have been withdrawn in view of the amendments to the claims. The rejections with Japan 53-40995 stand. In Japan 53-40995 a single hull vessel is modified to be a double hull vessel by cutting out a part of deck 7 and using it to make an elevated floor 22. Neither the pre-located bulkheads 3 nor the pre-located bulkheads 4 are moved or modified. They remain as is. A hatch 26 is formed where the opening in the deck 7 is created. Thus the claimed converted vessel and the method of converting the vessel as claimed are anticipated by Japan 995 except in those instances where Japan 995 is combined with Hagner and/or Garcia. While applicant argues that there is no need to cut the section of deck 7 used to form

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floor 22 into panels as taught by Hagner because evidently, the inventors of Japan 995, already know how to handle the cut section of deck 7 as one piece, this argument is not persuasive because even though knowledge of how to handle the cut section of deck 7 as one piece may exist, knowledge of dividing the cut section of deck 7 into panels still has desirability. Each panel will be easier to handle. Although one can handle the cut section of deck 7 as one piece, handling it as many panels would be easier.

- 8. This action is not being made final because the examiner failed to treat claims 25-27 in the first office action.
- 9. Translations of the Japanese references used in the rejection set forth in the first office action are cited.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sherman D. Basinger

Primary Examiner
Art Unit 3617

Wednesday, June 01, 2005